

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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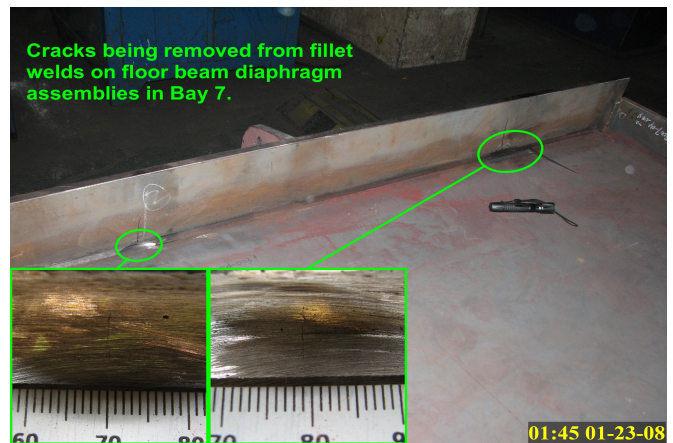
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001328**Date Inspected:** 22-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:****Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:****Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:****Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:****Yes No N/A****Delayed / Cancelled:****Yes No N/A****Bridge No:** 34-0006**Component:** Tower mock ups and OBG components**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) inspector, Scott Croff, was present at Zhenhua Port Machinery Company, Ltd (ZPMC) to observe the scheduled mock up construction and production construction of the SAS Superstructure.

Bay 7: The QA inspector conducted a survey of work in progress on floor beam diaphragm components. At the time of this survey, there were no ZPCM personnel in Bay 7 and the work that was being observed is scheduled to resume on day shift of 1-23-2008. During the survey, the QA inspector noted that multiple repairs of complete joint penetration (CJP) and fillet welds are in progress. The QA inspector noted that the CJP weld repairs are being conducted after ultrasonic testing (UT) has been conducted by ZPMC Quality Control (QC) personnel and QA verification. The QA inspector observed that CJP splice weld 023 of FB002-02 was previously identified by the QA inspector Joe Lanz as not satisfying the UT acceptance criteria of AWS D1.5 2002 Table 6.3. The QA inspector noted that this weld does not appear to have been repaired yet. The QA inspector also observed that 2 of the repairs in progress (FB001-03 weld 045 and FB008-02 weld 043) have excavations that extend beyond the CJP and portions of fillet welds and base metal in the transition have been removed. The QA inspector observed that there is a hole visible through the junction of the plates on FB008-02. See the attached photo. During the survey, the QA inspector observed that excavations on FB007-02 weld 045 measure a combined length of 375mm. The total weld length is 680mm and is a seismic performance critical member (SPCM) weld. The QA inspector noted that per the contract special provisions and AWS D1.5 2002, this repair should be approved by the Engineer as a critical weld repair (CWR). At this time, the QA inspector is not aware of an approved CWR for this repair. Also during the survey, the QA inspector noted that 4 of the assemblies (FB007-03, FB008-04, FB015-01 & FB016-01) have markings visible that magnetic particle testing (MT) has been accepted by ZPMC QC personnel.

# WELDING INSPECTION REPORT

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## Summary of Conversations:

As noted above, there were no ZPMC personnel in Bay 7 and the QA inspector had no conversations with any ZPMC personnel at any other locations. The QA inspector Scott Croff informed the QA inspector Ken Jobes of the above mentioned observations, to be included with a log of activities for this shift. There were no other notable conversations during this shift.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

**Inspected By:** Croff, Scott

Quality Assurance Inspector

**Reviewed By:** Cuellar, Robert

QA Reviewer